UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,814	05/27/2005	Robert Mark Stefan Porter	282544US8XPCT	6632

22850 7590 01/22/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
HANNE, SARA M	

ART UNIT	PAPER NUMBER
2179	

NOTIFICATION DATE	DELIVERY MODE
01/22/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/536,814	PORTER ET AL.	
	Examiner	Art Unit	
	SARA M. HANNE	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-16 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-16 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 May 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-6 and 8-20 are pending in this application.

Claim Objections

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 now contains the subject matter of Claim 6.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-6, 8-12,14-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snook, US Patent 6400378, and further in view of Dufaux, US Patent 6711587.

As in Claims 1 and 15, Snook teaches a media handling system in which candidate video sequences are displayed on a display screen in schematic form for selection by a user (Fig. 3 and corresponding text) and method (Fig. 3 and corresponding text), the system and method comprising: a display screen configured to display representations of the candidate video sequences for selection by a user (ref. 120), each representation including one or more images derived from the respective video sequences (Col. 2, lines 64-66); and a user control means for defining a set of one or more of the video sequences (Col. 2, line 55-Col. 3, line 1). While Snook teaches displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences, they fail to show the means for detecting human faces in the candidate video sequences to represent the candidate video sequences as a keyframe as recited in the claims. In the same field of the invention, Dufaux teaches a media handling system similar to that of Snook. In addition, Dufaux further teaches means for detecting human faces in the candidate video sequences (Fig. 5, ref. 500 and corresponding text); and assigning them as the key frame representations of the candidate video sequences (Col. 4, lines 4-7). It would

have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences taught by Snook to include the means for detecting human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain means for detecting human faces in candidate video sequences, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

Snook fails to explicitly teach detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Col. 1, lines 55-57); each displayed representation of a candidate video sequence including one or more images representing human faces which have the highest probability levels amongst the respective video sequences (Col. 12, line 4 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set

of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image with the highest probability of containing human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

Snook fails to explicitly teach weighting frames according to the size of detected human faces derived from the respective video sequences. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Fig. 5) and to weight at least some of the detected probability levels in dependence on the size of the detected face (Col. 12, lines 4 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the weighting frames according to the size of detected human faces derived from the respective video sequences of

Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image with the highest probability of containing a particular sized human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more accurate face detection method for keyframe selection would have been obtained, as taught by Dufaux.

As in Claim 2, Snook teaches the set of one or more of the video sequences is an ordered edited set forming an output media product (Col. 2, lines 62-64).

As in Claim 3, the above combination of Snook and Dufaux teach the system of Claim 1 as rejected *supra*. Snook further teaches a further ordered representation of a group of at least a subset of the video sequences forming the output media product (Snook, Col. 8, lines 2-3). Snook fails to explicitly teach images representing human faces derived from the respective video sequences in the group. Dufaux teaches detected human faces represent their respective video sequences (Dufaux, Col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the means for detecting human faces in the

candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image representing human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

As in Claim 4, Snook teaches the ordered representation is a timeline representation ("video timeline", Col. 6, line 29), providing an ordered representation of the group of video sequences forming the output media product along a generally rectilinear path on the display screen (Fig. 6A and corresponding text).

As in Claim 5, Snook teaches which the ordered representation may be scaled so as to vary the proportion of the video sequences forming the output media product which are currently displayed in the ordered representation (Fig. 6A ref. 625 and corresponding text).

As in Claim 6, Snook fails to explicitly teach detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Col. 1, lines 55-57); each displayed representation of a candidate video sequence including one or more images representing human faces which have the highest probability levels amongst the respective video sequences (Col. 12, line 4 et

seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image with the highest probability of containing human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

As in Claim 8, Snook fails to explicitly teach weight the probability levels so that detected faces closer in size to a desired representation size are more likely to be selected to form a displayed representation. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Fig. 5) and to weight at least some of the detected probability levels in dependence on the size of the detected face (Col. 12, lines 4 et seq.); each displayed representation of a candidate video sequence including one or more images

representing human faces which have the highest weighted probability levels amongst the respective video sequences (Col. 12, line 4 et seq.). Dufaux further teaches the detecting means weights the probability levels so that detected faces closer in size to a desired representation size are more likely to be selected to form a displayed representation (Col. 2, lines 12-25). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the weight the probability levels so that detected faces closer in size to a desired representation size are more likely to be selected to form a displayed representation Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an keyframe image determined according to weight, weight the probability levels so that detected faces closer in size to a desired representation size are more likely to be selected to form a displayed representation. One would have been motivated to make such a combination because a way for the system to select a more accurate facial detection method for keyframe selection would have been obtained, as taught by Dufaux.

As in Claim 9, Snook fails to explicitly teach the detecting means applies the weighting over a subset of the fields or frames of a video sequence. Dufaux teaches the detecting means applies the weighting over a subset of the fields or frames of a video sequence (Col. 2, lines 20-24). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the weighting frames according to the size of detected human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by a detected keyframe image, the detecting means is operable to apply the weighting over a subset of the fields or frames of a video sequence. One would have been motivated to make such a combination because a way for the system to select a more accurate face detection method for keyframe selection would have been obtained, as taught by Dufaux.

As in Claims 10-11, Snook fails to explicitly teach the weighting over frames of a video sequence. Dufaux teaches the detecting means applies the weighting over frames of a video sequence (Col. 2, lines 20-24). It would have been obvious to one of

ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the detecting means applies the weighting over frames of a video sequence of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by a detected keyframe image, the detecting means applies the weighting over frames of a video sequence. One would have been motivated to make such a combination because a way for the system to select a more accurate face detection method for keyframe selection would have been obtained, as taught by Dufaux.

As in Claim 12, Snook teaches selection of a displayed representation by the user control causes the display of the corresponding video sequence (Col. 3, lines 33-37).

As in Claim 14, Snook fails to explicitly teach indicating that faces detected in two or more respective ones of the candidate video sequences represent the same person's face. Dufaux teaches a user control means indicates that faces detected in two or more of the candidate video sequences represent the same person's face (Fig. 5 and corresponding text). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was

made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the indicating that faces detected in two or more respective ones of the candidate video sequences represent the same person's face of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by a detected keyframe image with detected faces and indicating that faces detected in two or more respective ones of the candidate video sequences represent the same person's face. One would have been motivated to make such a combination because a way for the system to select a more accurate face detection method for keyframe selection would have been obtained, as taught by Dufaux.

As in Claim 16, Snook teaches computer readable storage medium (Fig. 2 and corresponding text) encoded with a computer readable program configured to cause an information processing apparatus to execute the method of Claim 15 (See Claim 15 rejection *supra*).

As in Claim 20, Snook teaches a media handling system in which candidate video sequences are displayed on a display screen in schematic form for selection by a user (Fig. 3 and corresponding text), the system comprising: a display screen

configured to display representations of the candidate video sequences for selection by a user (ref. 120), each representation including one or more images derived from the respective video sequences (Col. 2, lines 64-66); and a user control for defining a set of one or more of the video sequences (Col. 2, line 55-Col. 3, line 1). While Snook teaches displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences, they fail to show the detector to detect human faces in the candidate video sequences to represent the candidate video sequences as a keyframe as recited in the claims. In the same field of the invention, Dufaux teaches a media handling system similar to that of Snook. In addition, Dufaux further teaches detector to detect human faces in the candidate video sequences (Fig. 5, ref. 500 and corresponding text); and assigning them as the key frame representations of the candidate video sequences (Col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences taught by Snook to include the detector to detect human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain a detector to detect human faces in candidate video sequences, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences. One would have been motivated to make such a combination

because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

Snook fails to explicitly teach detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Col. 1, lines 55-57); each displayed representation of a candidate video sequence including one or more images representing human faces which have the highest probability levels amongst the respective video sequences (Col. 12, line 4 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the detecting human faces derived from the respective video sequences and displaying the one with the highest probability of containing a face in the group of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image with the highest probability of containing human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

Snook fails to explicitly teach weighting frames according to the size of detected human faces derived from the respective video sequences. Dufaux teaches the detecting means is operable to detect a probability of a human face being present in each field or frame of the video sequences (Fig. 5) and to weight at least some of the detected probability levels in dependence on the size of the detected face (Col. 12, lines 4 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the weighting frames according to the size of detected human faces derived from the respective video sequences of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image with the highest probability of containing a particular sized human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more accurate face detection method for keyframe selection would have been obtained, as taught by Dufaux.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snook, US Patent 6400378, Dufaux, US Patent 6711587 and further in view of Trivedi et al., US Patent Application Publication 2006/0187305, hereinafter Trivedi.

Snook and Dufaux teach means for detecting human faces in candidate video sequences, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences (Claim 1 rejection *supra*). While Snook and Dufaux teach displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences, detecting human faces in the candidate video sequences to represent the candidate video sequences as a keyframe, they fail to show the candidate video sequences are selected from a video sequence captured by a surveillance camera as recited in the claims. In the same field of the invention, Trivedi teaches a media handling system and facial detection similar to that of Snook and Dufaux. In addition, Trivedi further teaches in which the candidate video sequences are selected from a video sequence captured by a surveillance camera (Par. 0038). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook, Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences, detecting human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences taught by Snook and Dufaux to include the candidate video sequences are selected from a video

sequence captured by a surveillance camera of Trivedi, in order to obtain means for detecting human faces in candidate video sequences captured by a surveillance camera, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences. One would have been motivated to make such a combination because a way for police and security guards to single out people from video surveillance would have been obtained, as taught by Trivedi.

Response to Arguments

Applicant's arguments filed 11/3/08 have been fully considered but they are not persuasive.

The applicant states "that a face picture stamp output purely based on face probability does not always give the best quality picture stamp" and goes on to suggest that the detected probability levels are based on more than probability of a face in a frame based on the size of the detected face (page 9 of the remarks submitted 11/3/08), however the claims state that the probability level is at least limited by the size of the face, and does not state any other factors that determine the probability level.

The examiner agrees that Snook fails to teach detecting human faces in the candidate video sequences for detecting the probability of a human face being present.

The applicant states that Dufaux "is silent regarding a user control for defining a set of one or more video sequences" (page 10, lines 13-14), however this limitation has

already been taught by Snook as mapped above: “a user control means for defining a set of one or more of the video sequences (Col. 2, line 55-Col. 3, line 1)”.

In response to the applicant's argument that "Dufaux is silent regarding weighting a detected probability level depending on a size of a detected face" (page 10, lines 21-22) the examiner disagrees. Dufaux teaches giving weight, referred to as a weighting factor (Col. 2, line 24) to determine the shot score, according to different limitations including the skin pixels (Col. 2, line 22). This is further illustrated by Dufaux in Col. 6, beginning on line 41, when they begin to discuss the process of determining if the frame has people in it. Frames that have smaller faces are not given as much weight because they "are not likely to be representative of the video" as a whole.

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar video editing and keyframe selection techniques as well as methods for detecting human faces within video.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M. Hanne whose telephone number is (571) 272-4135. The examiner can normally be reached on M-F 7:30am-4:00pm, off on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sara M Hanne/
Examiner, Art Unit 2179